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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/614,186	07/08/2003	Randy McKay	85229-102 ADB	7098
23529	7590	05/03/2006	EXAMINER	
ADE & COMPANY INC. P.O. BOX 28006 1795 HENDERSON HIGHWAY WINNIPEG, MB R2G1P0 CANADA			BHAT, NINA	
			ART UNIT	PAPER NUMBER
			1764	

DATE MAILED: 05/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/614,186

Applicant(s)

MCKAY ET AL.

Examiner

N. Bhat

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,6-11,13-18 and 21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,6-11,13-18 and 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

1. Applicant's arguments have been fully and carefully considered. Applicant's amendments have defined over the Beida et al. reference however, upon updating the search new art has been found which will be applied necessitated by amendment.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 1-3, 6-11, 13-18 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rozenshtein et al. 5,851,498 in combination with Sargeant et al. 4,813,396.

Rozenshtein et al. teach a catalytic heater in combination with a modular boiler. The resulting infrared radiation from the distal side of the catalytic heater is directed to an object to be heated which in this case is a fluid chamber of a boiler.[Note Claim 1 and Claim 9]

However, Rozenshtein et al. does not teach a surge tank coupled to the inlet header of the heat exchanger.

Sargeant et al. teach a boiler or water heater, which is in combination with a combustion heater. The combustion heater provides heat for heating the water within the water heater. The heat exchanger (170) has a water inlet (87) and a water outlet (88). The inlet and outlets are located at the same end at the top end and top plate structure. The structure of the fluid path through the heat exchanger and arrangement wherein water conducted through the heat exchanger encompassing a cylindrical radiant surface burner is similar in function as to how the heat exchanger exchanges heat with the catalytic radiating surface. Sargeant et al. further teaches a heater having a heat radiating surface and thermostatic control and is capable of being retrofit into heaters having pre-existing thermostatic control. Sargeant teaches thermostatic control of the combustion heater, which is supported in communication with the heat exchanger fluid, located within the headers of the heat exchanger.

It would have been obvious from the combined teaches of Rozenshtein et al. who teaches a catalytic heater in combination with a boiler to include the boiler/heat exchanger as claimed of Sargeant et al. In Sargeant, the heat exchanger is used with a radiative combustion heater, to replace the radiative combustion heater with a catalytic heater such as taught in Rozenshtein et al. fairly teaches and suggests applicant's invention and to substitute the combustion heater to a catalytic heater to be used with a boiler or water heater such has been taught and suggested by both Rozenshtein et al. and Sargeant et al. thereby permitting the substitution of heaters.

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5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hirano et al. teach a method of accelerating radiative transfer. Brulfert et al.'602 and 303 teach a boiler or steam generator, which includes a catalytic combustor for hydrocarbons. Ledjeff et al. teach a hot water heater. Maenishi et al. teach a catalyt combustion apparatus. Kendall et al.'829 and '762 teach catalytic combustion heaters which includes a radiant section of tube coils for heating a process fluid. Mead et al. teach a compact steam generator and system.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to N. Bhat whose telephone number is 571-272-1397. The examiner can normally be reached on Monday-Friday, 9:30AM-6:00PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on 571-272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


N. Bhat
Primary Examiner
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